

# Nachhaltige Entwicklung in Zeiten des Klimawandels: Illusion, Option oder Notwendigkeit ?

Klimawandel und Ernährungssicherheit  
FUG, Urs Wiesmann, 13. Nov. 2010

## (Klimawandel und) Ernährungssicherheit

**Primär betroffen:**

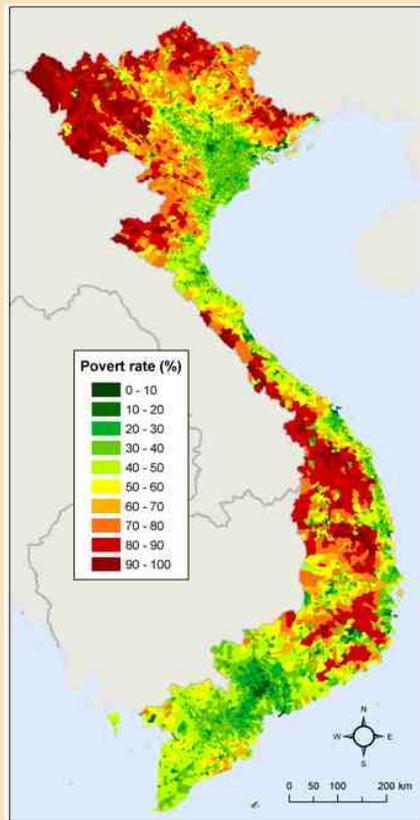
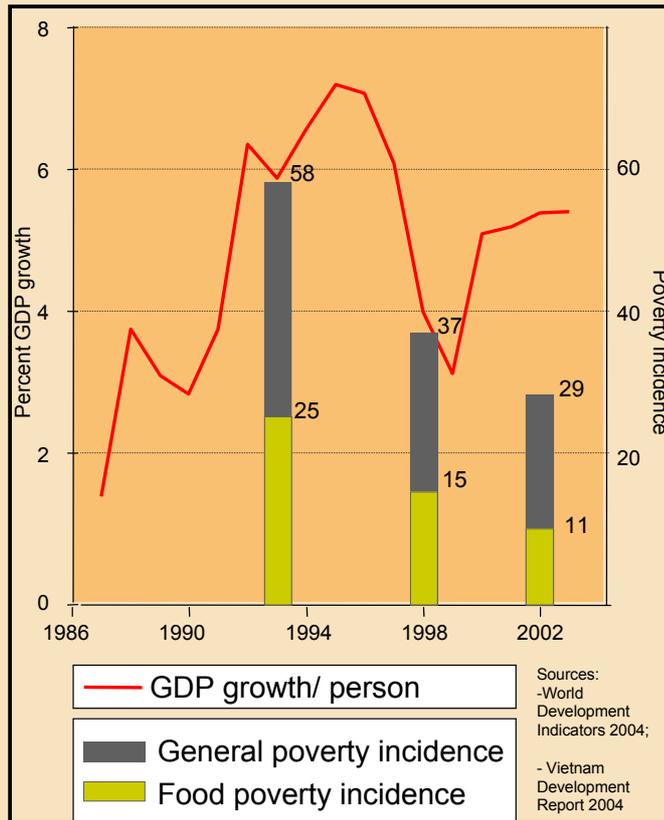
**Landwirtschaftliche Kleinproduzenten  
(Nahrungsproduktion)**

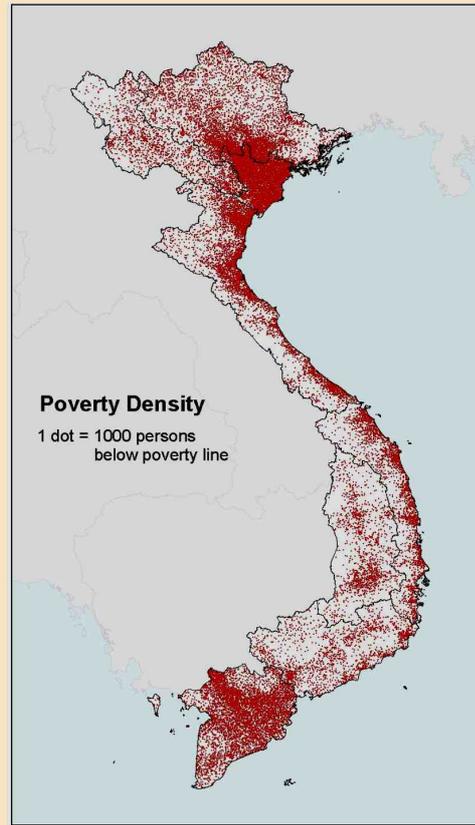
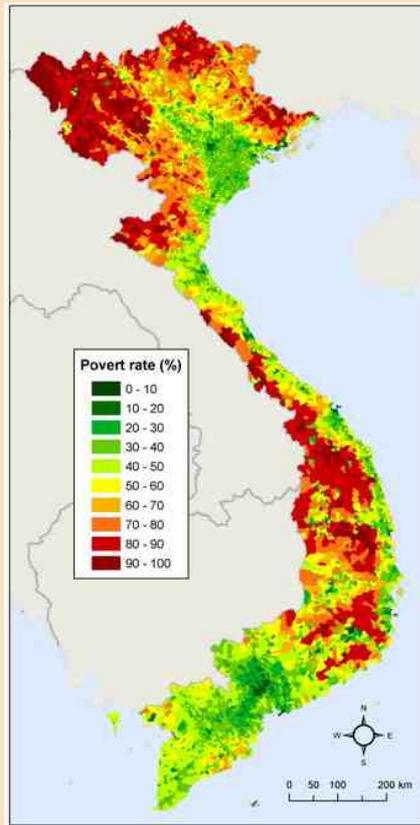
**Arme landwirtschaftliche Kleinproduzenten  
(Nahrungsproduktion und Ernährung)**

**Arme nicht-landwirtschaftliche Bevölkerung  
(Ernährung)**

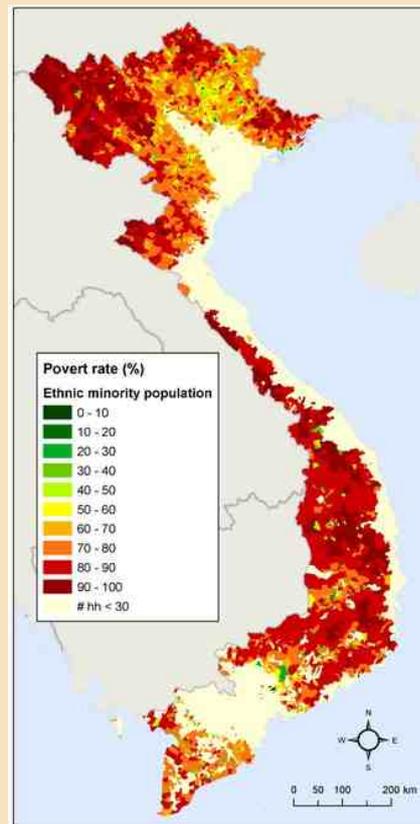
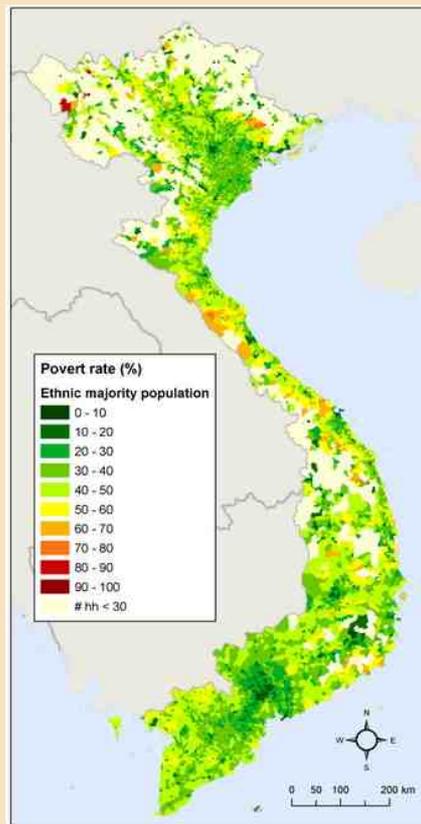


## Armut; Bsp Vietnam





Q: M. Eprecht



Q: M. Eprecht

# Klimawandel und Ernährungssicherheit

**Primär betroffen:**

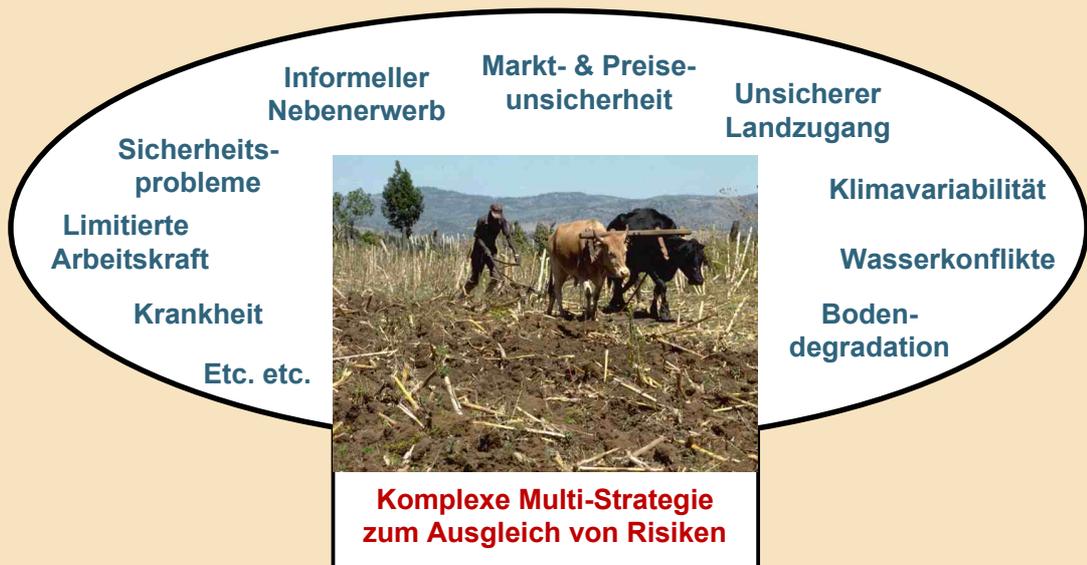
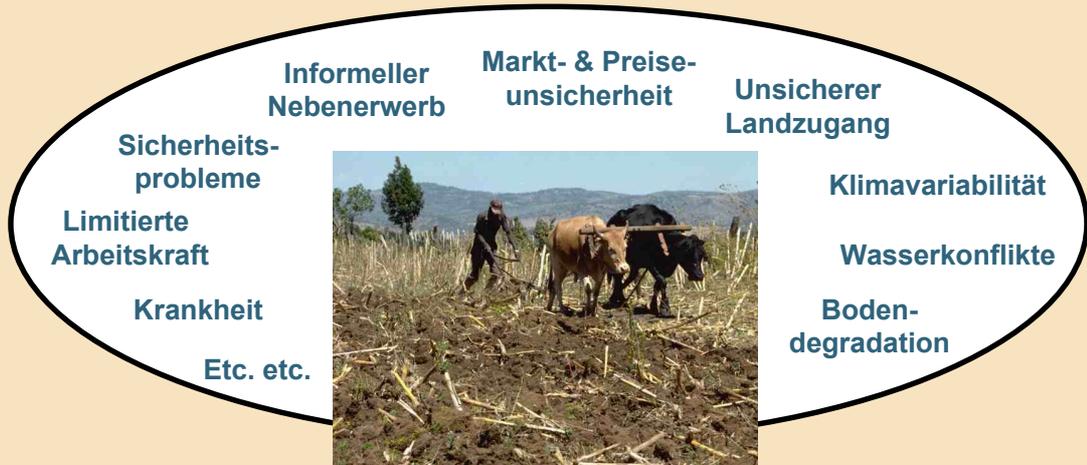
**Landwirtschaftliche Kleinproduzenten  
(Nahrungsproduktion)**

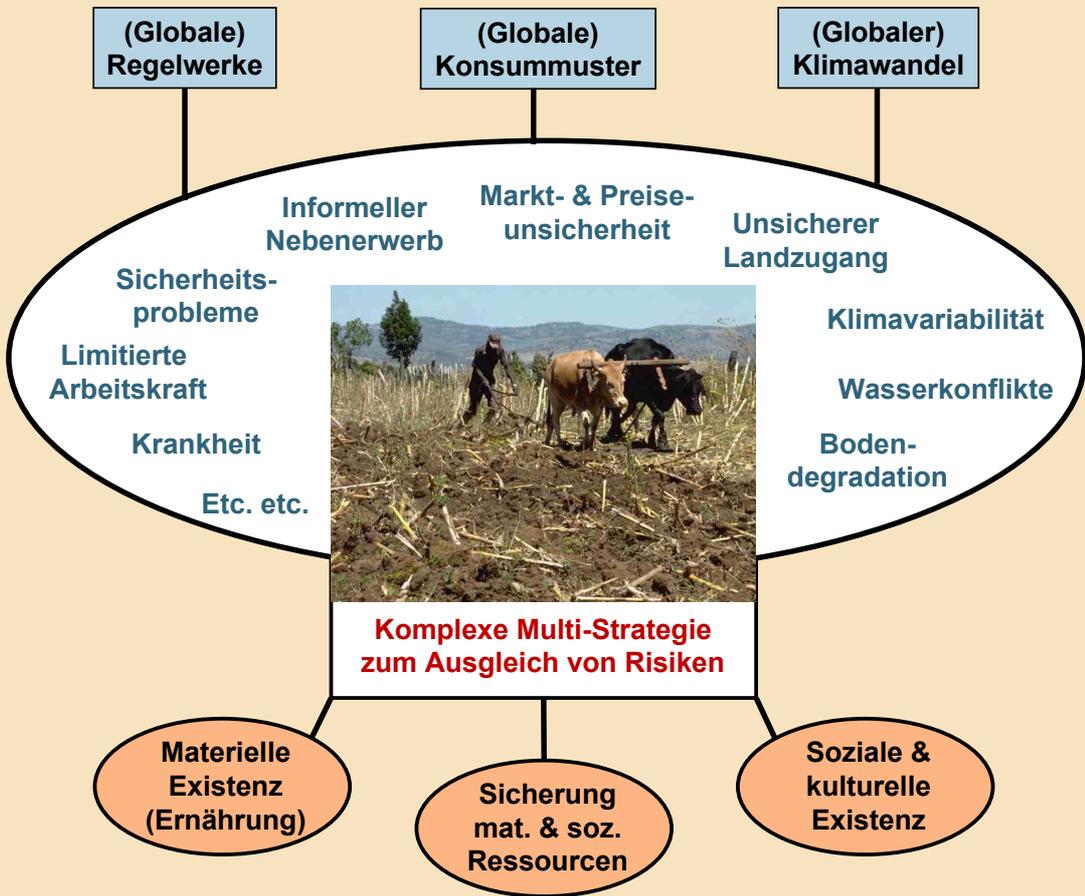
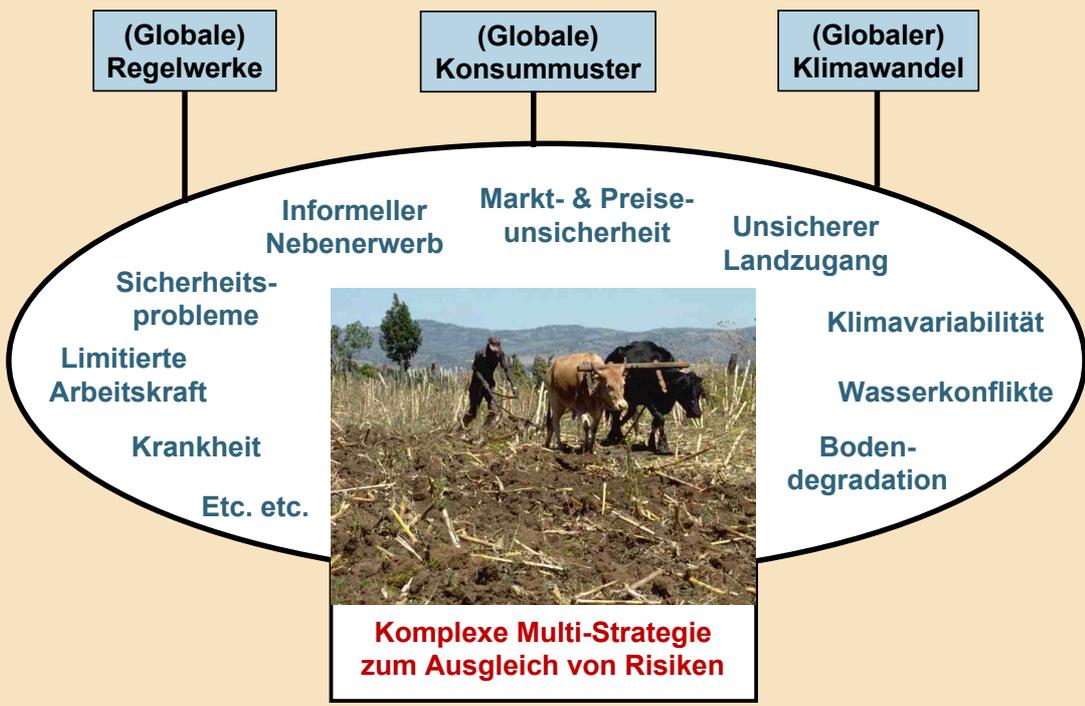
**Arme landwirtschaftliche Kleinproduzenten  
(Nahrungsproduktion und Ernährung)**

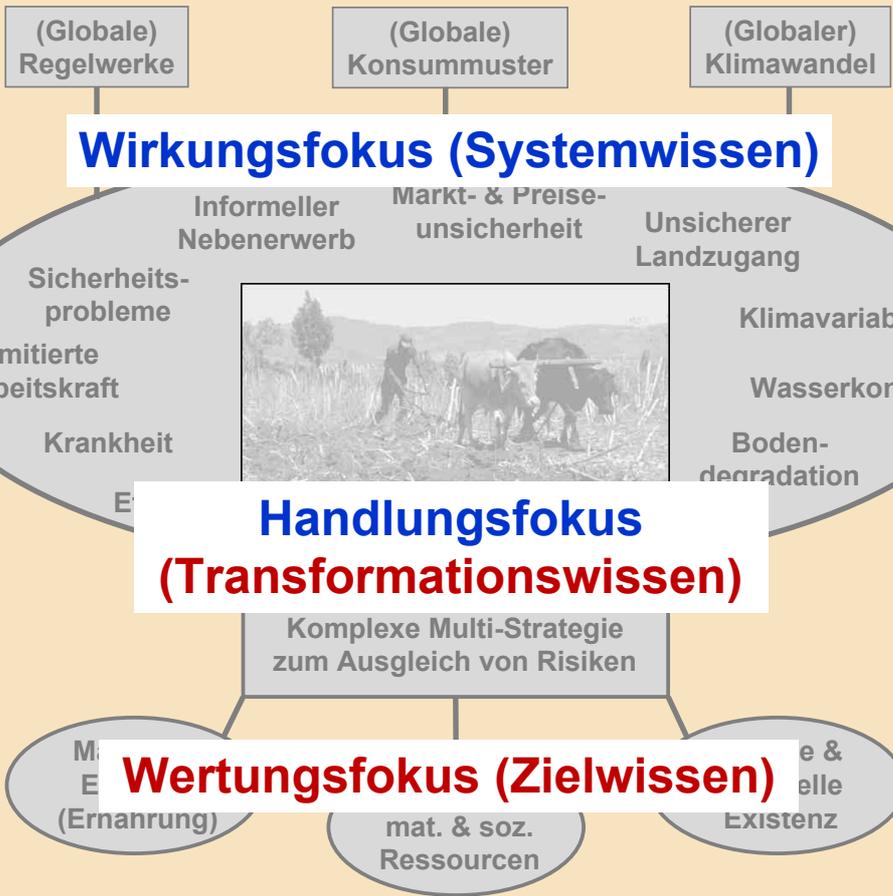
**Arme nicht-landwirtschaftliche Bevölkerung  
(Ernährung)**



	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1986												
1987												
1988												
1989												
1990												
1991												
1992												
1993												
1994												
1995												
1996												
1997												
1998												
1999												
2000												

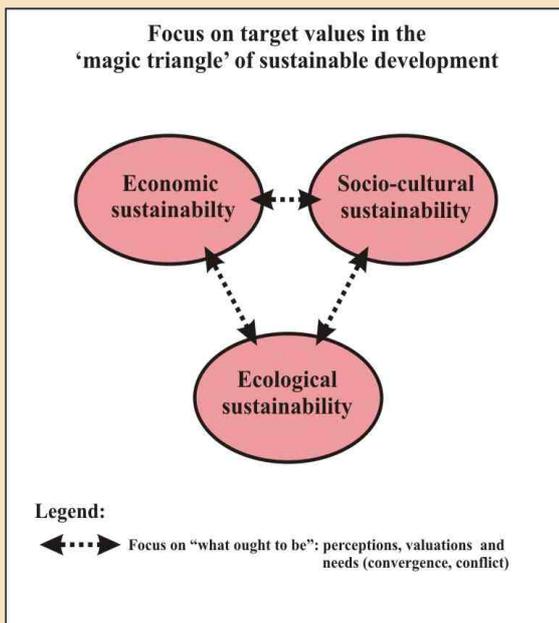






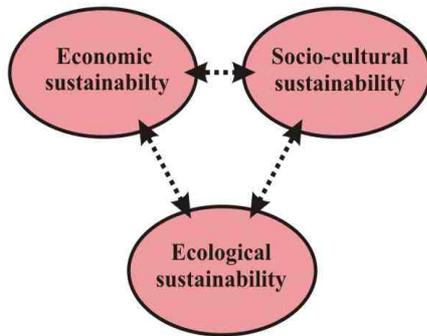
## Nachhaltige Entwicklung

### Wertungsfokus



## Wertungsfokus

Focus on target values in the 'magic triangle' of sustainable development

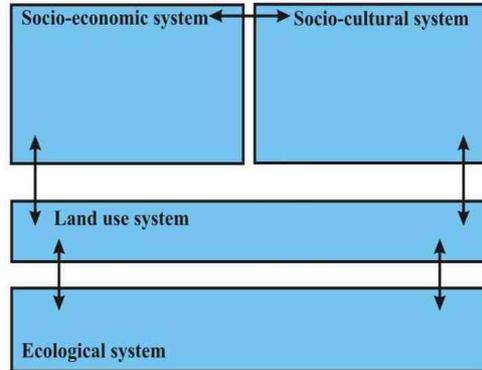


Legend:

◄-----► Focus on "what ought to be": perceptions, valuations and needs (convergence, conflict)

## Wirkungsfokus

Focus on processes in the four corresponding systems



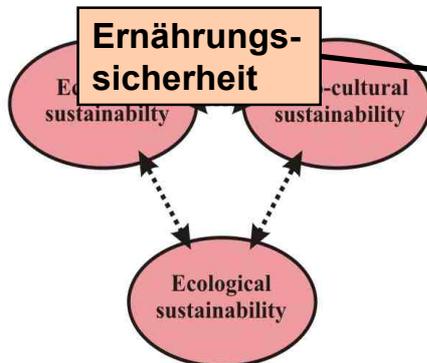
Legend:

↔ Focus on "is": relations, systemic interactions and dynamics

## Handlungsfokus

## Wertungsfokus

Focus on target values in the 'magic triangle' of sustainable development

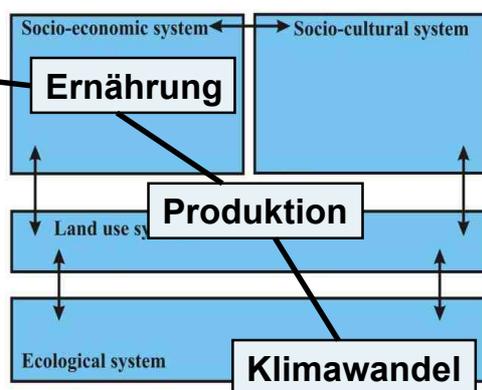


Legend:

◄-----► Focus on "what ought to be": perceptions, valuations and needs (convergence, conflict)

## Wirkungsfokus

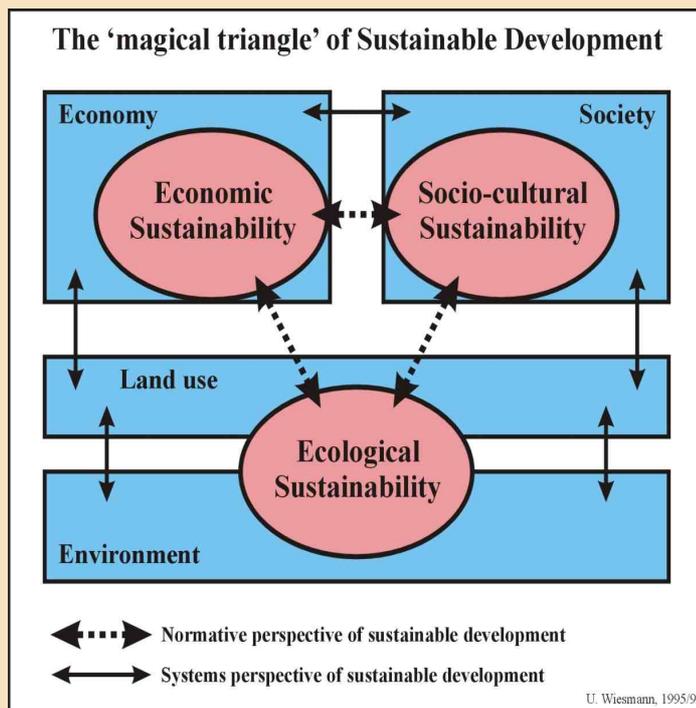
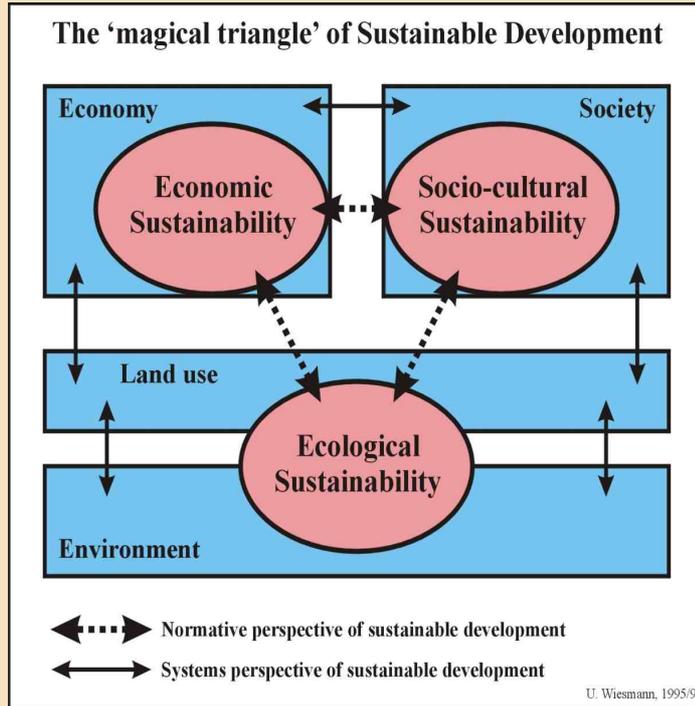
Focus on processes in the four corresponding systems



Legend:

↔ Focus on "is": relations, systemic interactions and dynamics

## Handlungsfokus



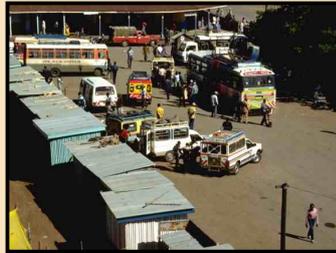
- **Wer wertet?**
- **Zukünftige Werte?**
- **Brücke zwischen Wert und System?**
- **Zielwissen**
- **Systemwissen**
- **Transformationswissen**
- **An (sozio-politisch) Kontext gebunden**
- **Globalem Wandel ausgesetzt**
- **Specifiche Antwort auf Wandel**

# Anwendungsbeispiel Mount Kenya

north  
nccr  
nos



north  
nccr  
nos

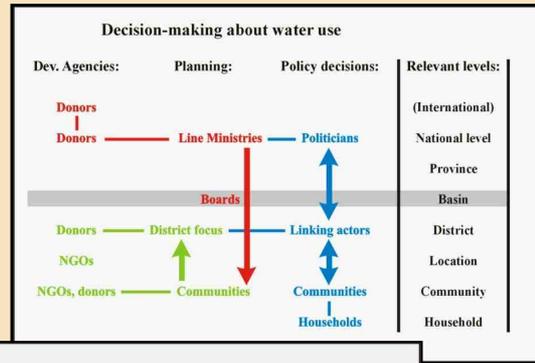
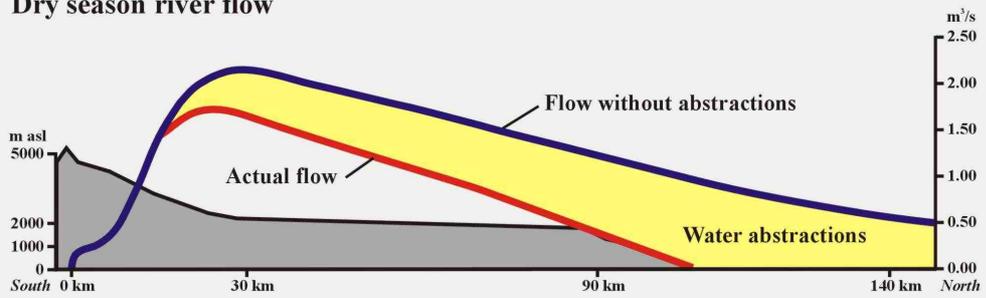


**Grosse  
Armut,  
Disparitäten,  
Degradation,  
Konflikte**

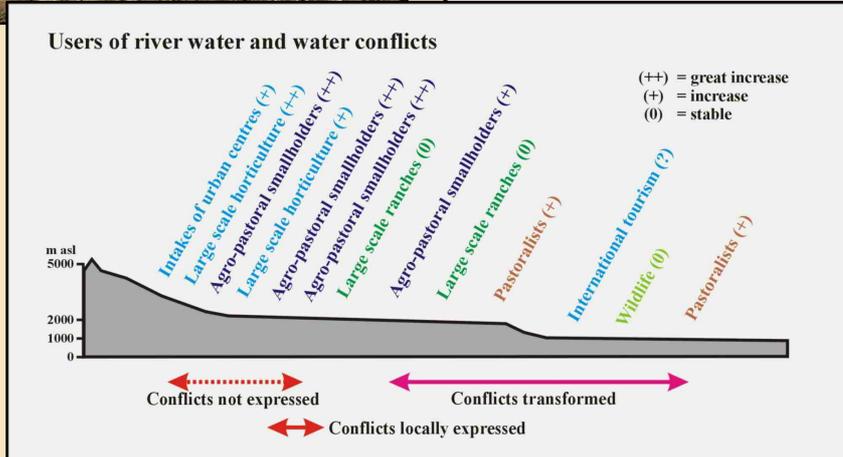


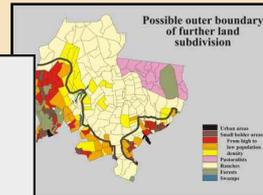
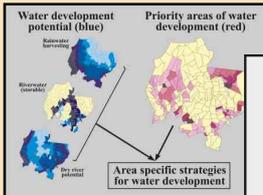


### Dry season river flow



### Users of river water and water conflicts





### Multi-level and multi-stakeholder strategy

Relevant levels:	Enhance water supply:	Reduce water demand:
(International)		
National level	Legal framework	Land tenure policy
Province		Infrastructure
Basin	Negotiations & control	
District	Supply planning	Land use planning
Sub-Catchment	Negotiations & control	
Location		Infrastructure
Community	Water use efficiency	Off-farm jobs
Household	Water use efficiency	Farming techniques

Awareness creation



**Grosse Armut, Disparitäten, Degradation, Konflikte**



# **Nachhaltige Entwicklung in Zeiten des Klimawandels:**

## **Illusion, Option oder Notwendigkeit ?**

**Klimawandel und Ernährungssicherheit  
FUG, Urs Wiesmann, 13. Nov. 2010**